

The Priority Valves distribute and trace the hydraulic flow from the supply pump of the hydraulic system to the hydraulic components which control and run the vehicle.

The Priority Valves are used only with the HSUS.../5(T) hydrostatic steering units. When connected, the steering unit and the priority valve represent sophisticated hydraulic tracing system that controls the flow in both main pipelines of the hydraulic system (the working and control one) at any time of its operation.

As a static signal, the "LS" signal must be used in systems with circuit stability. The connection between the priority valves and the HSUS.../5T steering units has to be as short as possible, but should not exceed 1.5m (for iron pipe with 4).

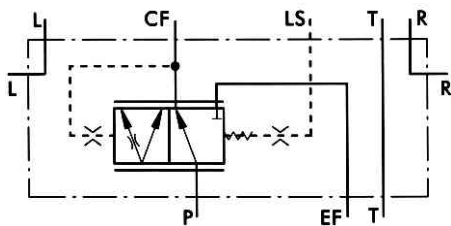
Specifications

Parameters		Type					
		PVF(D), PVT(D)			PVTA(D)		
Rate Flow	(l/min)	40, 80					
Control Spring Pressure	(bar)	4.5	7	10.5	4.5	7	10.5
Max. Pressure in Oil Ports (bar)	P, EF, R, L	200					
	LS, CF	175					
	T	20					
Weight, avg.	(Kg)	2.7			1.2		

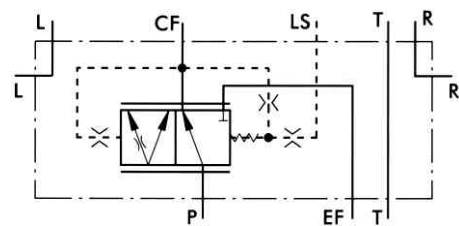
P- Pump, EF- Excess Flow, CF- Control Flow(first priority flow),

L- Left , R- Right, LS- Load Sensing, T- Tank

Modular Mounting

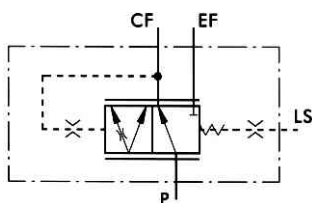


Static Signal
PVF ...40, 80/...

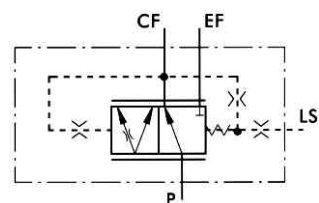


Dynamic Signal
PVFD... 40, 80/...

Pipe Mounting

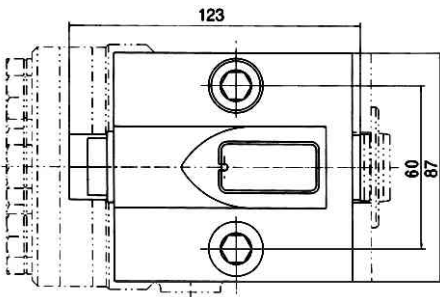
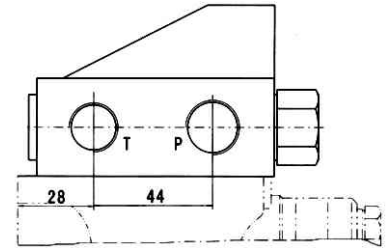
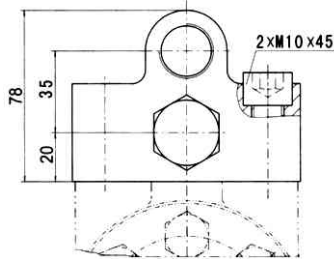
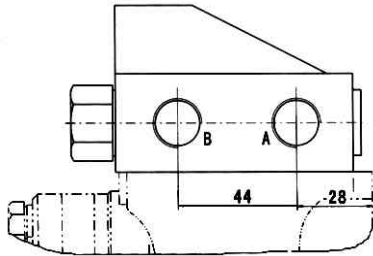


Static Signal
PVT40, 80 , PVTA 40/80



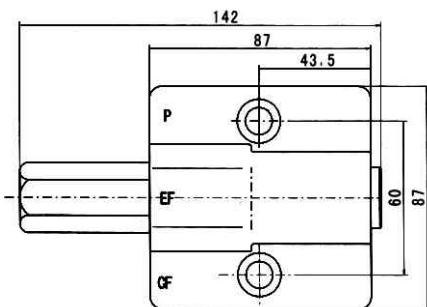
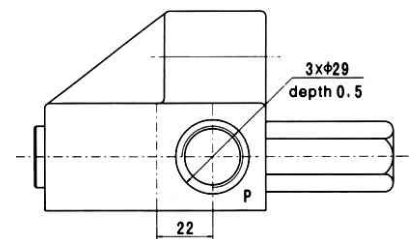
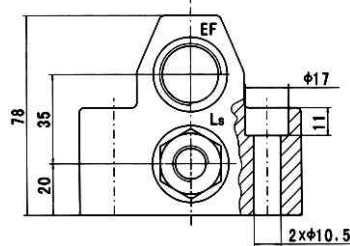
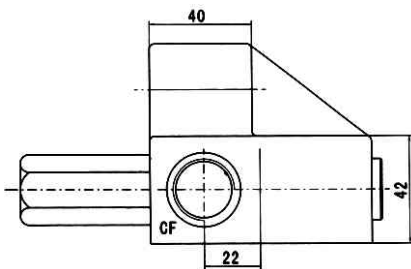
Dynamic Signal
PVTD40, 80 , PVTAD40,80

Dimensions and Mounting Data for PVF(D) 40,80/...



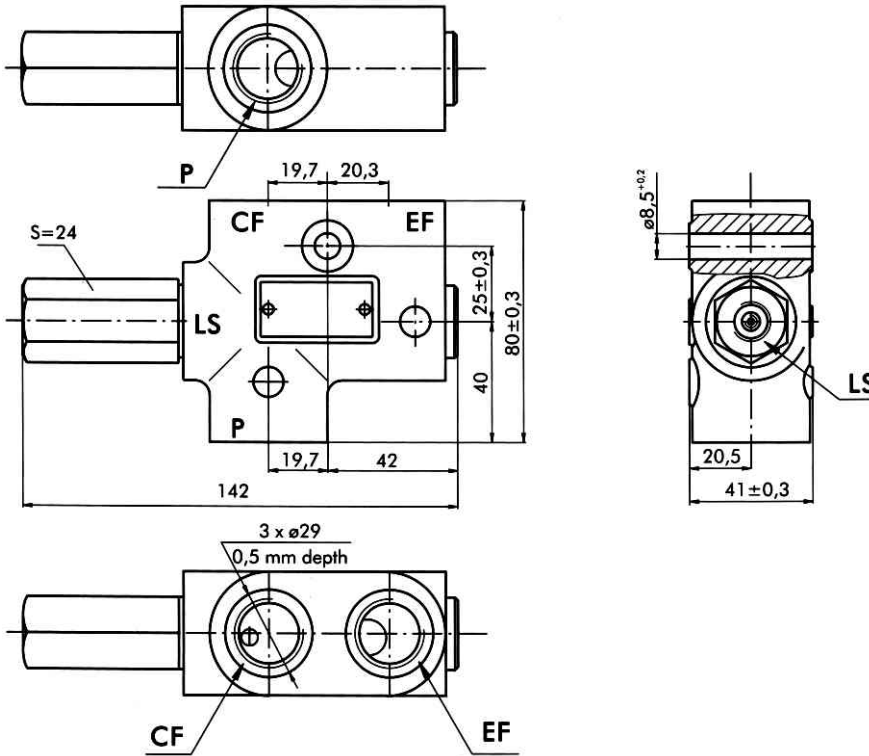
Code	Ports – P, EF Thread	Ports – T, RL Thread
-	G 1/2 14 mm depth	G 3/8 14 mm depth
M	M22 x 1.5 14 mm depth	M18 x 1.5 14 mm depth
U	7/8 – 14UNF O-ring 14 mm depth	3/4 – 16UNF O-ring 14 mm depth

Dimensions and Mounting Data for PVT(D) 40,80/...

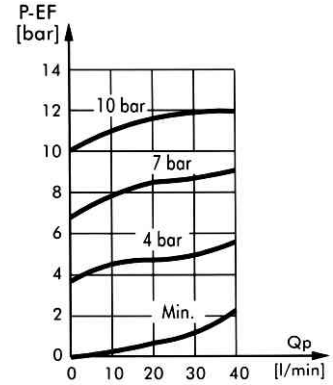


Code	Ports – P, EF Thread	Ports – CF Thread	LS - Ports
-	G 1/2 14 mm depth	G 1/2 14 mm depth	G 1/4 14 mm depth
M	M22 x 1.5 14 mm depth	M22 x 1.5 14 mm depth	G1/4 14 mm depth
U	7/8 – 14UNF O-ring 14 mm depth	3/4 – 16UNF O-ring 14 mm depth	7/8 – 20UNF O-ring 12,7 mm depth

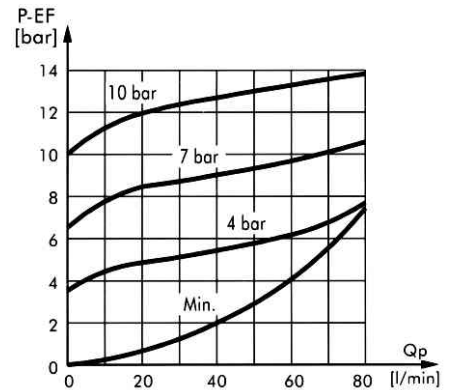
Dimensions and Mounting Data for PVTA 40,80/...



PV...40

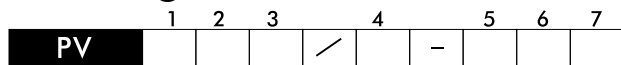


PV...80



Code	Ports – P, EF Thread	Ports – CF Thread	LS - Ports
-	G 1/2 14 mm depth	G 1/2 14 mm depth	G 1/4 14 mm depth
M	M22 x 1.5 14 mm depth	M22 x 1.5 14 mm depth	G1/4 14 mm depth
U	7/8 – 14UNF O-ring 14 mm depth	3/4 – 16UNF O-ring 14 mm depth	7/8 – 20UNF O-ring 12.7 mm depth

Ordering Information



Pos. 1 Mounting

- F** - Modularly Mounting
- T** - Pipe Mounting (Mode 1)
- TA** - Pipe Mounting (Mode 2)

Pos. 2 Signal Type

- Omit** - With Static Signal
- D** - With Dynamic Signal

Pos. 3 Rated Flow, l/min

- 40** **80**

Pos. 4 Control Spring Pressure, bar

- 4.5** **7** **10.5**

Pos. 5 Ports

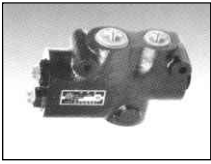
- Omit** - G 1/2
- U** - SAE (ANSI B1.1 - 1982)
- M** - Metric (ISO 262)

Pos. 6 Option (Paint)

- Omit** - Grey
- B** - Black
- 00** - No Paint

Pos. 7 Design Series

- Omit** - Factory specified



The Priority Valves PRT .../160 have built-in a pilot pressure relief valve, who protect the steering unit against excess pressure. The pilot pressure relief valve operates with the Shuttle of the Priority Valve to limit the maximum steering pressure P-T measured across the steering unit ports.

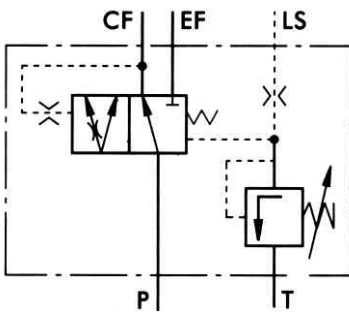
Specifications

Parameters		Type		
		PRT(E), PRTD(E)		
Rate Flow	(l/min)	40, 80, 160		
Control Spring Pressure	(bar)	4.5	7	10.5
Max. Pressure in Oil Ports (bar)	P, EF	200		
	LS, CF	175		
	T	15		
	PP	175		
Standard Relief Valve Pressure Settings (bar)		175*		
Weight, avg.	(Kg)	5.1		

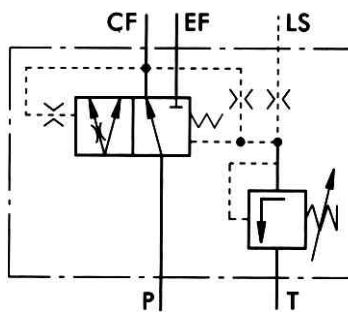
*- Adjusted valve pressure from 80 till 210 bar upon customer request.

P- Pump, **EF**- Excess Flow, **CF**- Control Flow(first priority oil flow),

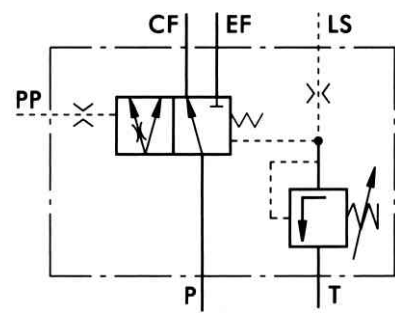
LS- Load Sensing, **T**- Tank, **PP**-Pilot Pressure



Static Signal
PRT 40, 80, 160/....

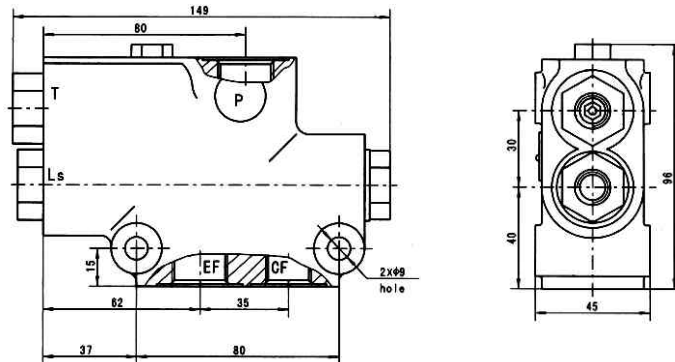


Dynamic Signal
PRTD 40, 80, 160/....



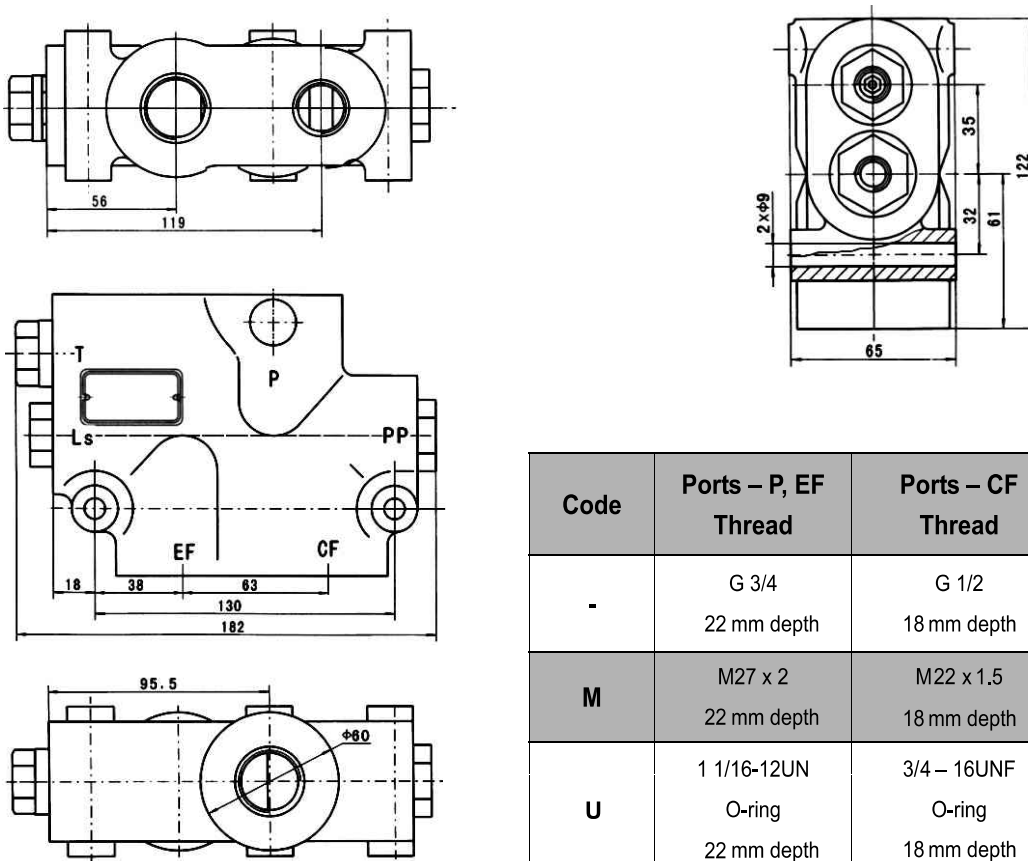
Static Signal with External Pilot
PRTE 160/....

Dimensions and Mounting Data for PRT(D) 40,80/...



Code	Ports – P, EF Thread	Ports – CF Thread	LS - Ports
-	G 1/2 16 mm depth	G 3/8 16 mm depth	G 1/4 14 mm depth
M	M22 x 1.5 16 mm depth	M18 x 1.5 16 mm depth	M12 x 1.5 14 mm depth
U	7/8 – 14UNF O-ring 16 mm depth	3/4 – 16 UNF O-ring 16 mm depth	7/16 – 20UNF O-ring 14 mm depth

Dimensions and Mounting Data for PRT(D) 160/...



Code	Ports – P, EF Thread	Ports – CF Thread	LS, PP, T - Ports
-	G 3/4 22 mm depth	G 1/2 18 mm depth	G 1/4 14 mm depth
M	M27 x 2 22 mm depth	M22 x 1.5 18 mm depth	M12 x 1.5 14 mm depth
U	1 1/16-12UN O-ring 22 mm depth	3/4 – 16UNF O-ring 18 mm depth	7/16-20UN O-ring 14 mm depth

Ordering Information

	1	2	3	4	5	6
PRT		-	-			

Pos.1 Signal Type

- Omit - With Static Signal
 D - With Dynamic Signal
 E* - With Static Signal w/External Pilot

Pos.2 Rated Flow, l/min

40 80 160

Pos.3 Control Spring Pressure, bar

4.5 7 10.5

Pos.4 Ports

- Omit - G 1/2 for PRT(D)40, 80 G 3/4 for PRT160
 M - Metric (ISO 262)
 U - SAE (ANSI B1.1 - 1982)

Pos.5 Option (Paint)

- Omit - Grey
 B - Painted
 00 - No Paint

Pos.6 Design Series

- Omit - Factory specified

Note: * Only for PRT 160/...

The priority valves are mangano-phosphatized as standard.